

KEVIN P. COWAN ET AL.  
Serial No.: 09/765,498

### REMARKS

Claims 3, 6-9, 13, 33, 36, 40, 43-47, 50, 52, 53, 56, 58, 59 and 70-73 are currently amended. Claims 1-2, 4-5, 10—12, 14-32, 34 and 49, and 61-69 have been canceled without prejudice. Claims 3, 6-9, 13, 33, 35-48, 50-60 and 70-73 remain before the Examiner for reconsideration.

In the final Office Action dated January 12, 2005, the Examiner rejected Claims 1, 2, 3, 6, 7, 8, 9, 10, 12, 13, 32, 33 under 35 U.S.C. 102(e) "as being anticipated by Aasmul et al. (USPN 6,533,183)." Specifically, the Examiner asserted that:

Aasmul et al. discloses a length of material that can be used on syringes that consists of indicators that represent a code when a light beam (electromagnetic energy) is transmitted and reflected from the length of material (notches and grooves) therefore, providing information about the syringe. (Figures 1,2,3,4,5 and Paragraph [0002], [0003], [0011], [0041], and entire reference).

In response to Applicant's arguments filed September 27, 2004, the Examiner further asserted that:

With regards to Aasmul, the applicant argues that there is no teaching of propagating light through the cartridge and wherein the light that enters the cartridge is detectable. The examiner disagrees with the applicant's interpretation of the claims and the prior art because Aasmul et al. has the same structure as the claimed invention which is a length of material that has indicators. Assume et al. discloses the same structure, as well as the same composition for the structure. According to MPEP section 2114, an apparatus claim must have a structurally different element in order to be patentable. Since the examiner does not seem any different in structure the rejection stands.

The examiner interpretations of Aasmul et al. are that Aasmul et al. would be capable of performing the function and intended use that is described in the claims. Light would be capable of being propagated, and light would be capable of interacting with the indicators concurrently. Therefore, the applicant maintains his rejections.

Since the applicant uses "adapted" and "substantially," this broadens the claims, as well as relies on functional language to overcome the prior art, as opposed to structural limitations, especially when this is a device claim.

KEVIN P. COWAN ET AL.  
Serial No.: 09/765,498

The examiner has found claims 35-39 to be in allowable form, because of the interaction with the sensor and how the light will interact with the syringe in order to provide information.

The examiner understands that the prior art is different than the invention, but the applicant fails to claim the invention in the right scope to overcome the prior art. A suggestion would be to include the sensor system in the claim or add more structure.

For the reasons set forth in the Amendment filed September 27, 2004 and other reasons, Applicants respectfully traverse the Examiner's rejection.

Nonetheless, in the interest of expedient prosecution Applicants have canceled claims 1, 10, 12, 33, 49 and 61-69 and amended independent claims 36 and 50 to set forth one embodiment of the present invention. The Examiner indicated in the telephone interview with the undersigned attorney for Applicant of today that the claims, as amended herein, would be allowable.

The Examiner also rejected claims 1-3, 6-10, 12, 13, 32, 33, 40-73 under 35 U.S.C. 103(a) "as being unpatentable over Hitchins et al. (USPN 5,944,694) and further in view of Aasmul et al. as applied to claim 1-3, 6-10, 12, 13, 32, 33, and further in view of Atherton (USPN 5,461,239)". Specifically, the Examiner asserted that:

Hitchins et al. disclosed syringe for use with powered injector to inject fluid into a patient comprising a syringe with a plurality of indicators along a length of material of the syringe wall, wherein the syringe comprises a body, a plunger, a mounting flange, a drip flange, but fails to disclose the workings of an optical sensing system that reflects and refracts the light beams to form the code that provides information about the syringe and the different depth of the angled surfaces.

Aasmul et al. discloses a length of material that refracts and reflects light to provide information about the syringe, but fails to disclose the use of different depths within the length of propagating material.

Atherton discloses the use of a length of material that can have different shapes, size, and geometry, which allow for recognition in an optical memory diffraction system. The different shapes and sizes and geometry of the material are used to produce a binary code, which is then detected by the optical memory system.

KEVIN P. COWAN ET AL.  
Serial No.: 09/765,498

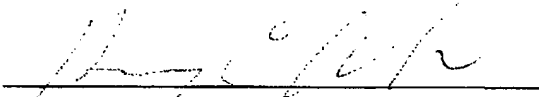
At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Hitchins et al. with Aasmul et al. and Atherton because Aasmul et al. teaches that adding a length of material comprising notches and grooves, wherein the length of material allows light to be reflected and refracted; which provides for a more accurate way of coding information on medical devices regardless of what the information might be (Aasmul Column 1, line 55-Column 2, line 14). The reason to combine the teachings of Atherton with Hitchins et al. and Aasmul et al. is because Atherton disclosed that the optical memory diffraction grating uses a plurality of spaced ridges of different shapes and sizes (angled surfaces with different depth) to produce a binary code that provides information with regards to the object being scanned. Therefore the teachings of Atherton further support Aasmul et al. as well as provide more information that was known at the time of the invention about optical scanning and how light being reflected can be used to obtain information.

For the reasons set forth above, for the reasons set forth in the Amendment filed September 27, 2004 and for other reasons, Applicants respectfully traverse the Examiner's rejection. However, the amendments set forth above have obviated the Examiner's rejection.

In view of the above amendments and remarks, the applicants respectfully requests that the Examiner withdraw the rejections of the claims, indicate the allowability of the Claims and arrange for an official Notice of Allowance to be issued in due course.

Respectfully submitted,

Dated: April 20, 2005

  
Henry E. Bartony, Jr.  
Reg. No. 34,772

Medrad, Inc.  
One Medrad Drive  
Indianola, Pennsylvania 15051  
(412) 767-2400